

Ingenious  Brain

*Inno*Oct 2024

Monthly Life Science & Healthcare Insights

## Table of Content

### PRODUCT UPDATES

1. [Universal Sequencing Technology Launches TELL-Meta Software for Metagenomics Applications](#)
2. [GeneCentric Therapeutics Unveils EXpressCT Liquid Biopsy Platform](#)
3. [PacBio Enhances HiFi Sequencing with SPRQ Chemistry for Revio™ System](#)
4. [NewBiologix Launches Xcell™ to Revolutionize Gene and Cell Therapy Production](#)
5. [Leica Microsystems Unveils SpectraPlex: Advancing 3D Spatial Phenotyping for Disease Research](#)
6. [Inocras Launches MRDVision: A Breakthrough in MRD Detection with Whole Genome Sequencing](#)
7. [Creative Proteomics Launches Acylcarnitine Analysis Service to Advance Metabolic Research](#)
8. [Twist Bioscience Unveils FlexPrep™ Ultra-High Throughput Library Preparation Kit for Agrigenomics and Population Genomics](#)
9. [Becton Dickinson Launches BD Omics-One XT WTA Assay for Automated Single-Cell Library Preparation](#)
10. [Inagene Diagnostics Launches Comprehensive Genetic Test for Cardiovascular Medications in Canada](#)
11. [Proteintech Genomics Launches MultiPro® Human Discovery Panel for Advanced Single-Cell Multiomics](#)
12. [NeoGenomics Launches AML Express for Rapid Genetic Profiling in Acute Myeloid Leukemia](#)
13. [seqWell Launches LongPlex Long Fragment Multiplexing Kit for Scalable Long-Read Sequencing](#)
14. [QIAGEN Receives FDA Clearance for QIAstat-Dx Mini Panel for Outpatient Respiratory Infections](#)
15. [WHO Approves Roche's rtPCR-based Mpx Assay for Emergency Use](#)
16. [Thermo Fisher's Oncomine Receives FDA Approval as Brain Tumor Diagnostic](#)
17. [FDA Approves FoundationOne® Liquid CDx as Companion Diagnostic for Itovebi™ in Breast Cancer](#)
18. [Burning Rock & Dizal Secure NMPA Approval for NGS-Based Companion Diagnostic for Sunvozertinib in Lung Cancer](#)
19. [WHO Approves Abbott's Alinity m MPXV Assay for Emergency Use to Enhance Global Mpx Testing](#)
20. [Azenta Gains U.S. Regulatory Approval for Clinical Long-Read Whole Genome Sequencing Test](#)



## **LEGAL UPDATES**

1. [European Unified Patent Court Invalidates 10x Genomics Patent Against NanoString's CosMx® SMI Products](#)
2. [DOJ Closes Investigation of CareDx Business Practices With No Wrongdoing Found](#)
3. [Foresight Diagnostics Responds to Roche Lawsuit, Deems It Meritless](#)
4. [Ludwig Enterprises Files Provisional Patent for Groundbreaking Breast Cancer Screening Algorithm to Rebrand as Revealia™](#)

## **ACQUISITIONS, SPINOUTS, AND EXPANSIONS**

1. [Vizgen to Merge with Ultivue, Completes Series D Financing Round](#)
2. [Eurofins to Acquire SYNLAB's Clinical Diagnostics Operations in Spain](#)
3. [LabGenomics USA Completes Acquisition of IMD CLIA Labs, Expands Nationwide Reach](#)
4. [Trinity Biotech Enters Oncology Space with Acquisition of EpiCapture](#)
5. [Bruker Acquires Dynamic Biosensors to Enhance Drug Discovery with Single-Cell Interaction Cytometry Systems](#)
6. [Twist Bioscience Secures \\$15 Million Cash Payment through Royalty Purchase Agreement with XOMA](#)
7. [SPT Labtech and ICE Bioscience Launch Joint Automated Laboratory in China for Intelligent Drug Screening](#)

## **COLLABORATIONS & PARTNERSHIPS**

1. [Akoya's Spatial Proteomics Platforms Chosen for UK's MANIFEST Consortium to Enhance Cancer Immunotherapy Research](#)
2. [MGI and OncoDNA Collaborate to Streamline NGS Workflow for Comprehensive Genomic Profiling in Clinical Oncology](#)
3. [ADx NeuroSciences and Alamar Biosciences Partner to Develop Customized Biomarker Assays for Neurological Disease Therapeutics](#)
4. [PredxBio Partners with the University of Queensland to Develop Spatial Biomarker Companion Diagnostic for Immunotherapy](#)
5. [4baseCare Partners with Innovate Life Sciences to Advance Genomics Research for Precision Oncology in Dubai](#)
6. [Nucleome Therapeutics Strategically Collaborates With J&J to Identify Target Genes in Autoimmune Diseases](#)
7. [Avacta and Tempus Enter Strategic Collaboration to Advance AI-Driven Drug Development in Oncology](#)
8. [BostonGene and Sarah Cannon Research Institute Partner to Advance Targeted Cancer Therapies](#)
9. [Delve Bio Partners with Broad Clinical Labs to Expand Metagenomic Sequencing for Neurological Infections](#)
10. [Next Gen Diagnostics Partners with Shionogi to Advance Cefiderocol Susceptibility Testing](#)
11. [Owkin and AstraZeneca Partner to Develop AI Tool for gBRCA Pre-Screening in Breast Cancer](#)
12. [Tempus and JW Pharmaceutical Collaborate to Accelerate Oncology R&D with Real-World Data and Biological Modeling](#)



### Universal Sequencing Technology Launches TELL-Meta Software for Metagenomics Applications

Last month, Universal Sequencing Technology, a Massachusetts-based leader in Long-Read DNA Sequencing solutions, introduced the TELL-Meta software pipeline, designed to revolutionize metagenomics research. Leveraging the advanced TELL-Seq linked-read technology, this powerful tool offers unparalleled accuracy in analyzing complex microbiome data, enabling precise microbial diversity profiling and functional characterization. TELL-Seq's capabilities position it as a critical resource for large-scale metagenomics and microbiome research, driving innovation across clinical and environmental applications.

### GeneCentric Therapeutics Unveils EXpressCT Liquid Biopsy Platform

GeneCentric Therapeutics has launched its EXpressCT (Expression Signatures Through Circulating Tumor Signals) liquid biopsy platform, a breakthrough in molecular diagnostics that combines tissue RNA expression and epigenomic insights for enhanced biomarker detection. Designed to optimize liquid biopsy testing, EXpressCT enables more accurate and earlier disease detection, particularly in oncology. By integrating RNA and epigenomic data, the platform promises to refine clinical decision-making and support personalized treatment strategies. This innovation has the potential to significantly improve patient outcomes and advance precision medicine, making it a pivotal tool for pharma & healthcare leaders aiming to stay at the forefront of diagnostic advancements.





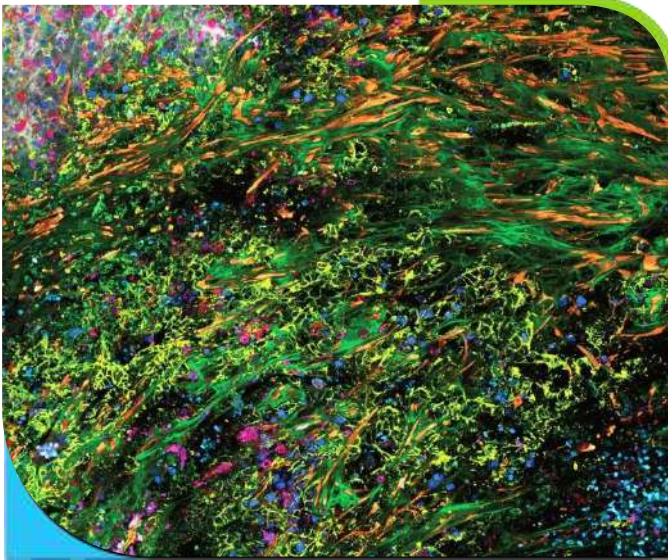
## PacBio Enhances HiFi Sequencing with SPRQ Chemistry for Revio™ System

PacBio has launched SPRQ, an advanced sequencing chemistry for its Revio™ system that significantly reduces DNA input requirements by fourfold, now requiring just 500ng per sample. This upgrade expands the range of sample types suitable for HiFi sequencing, offering greater flexibility and efficiency in genomic research. This innovation means improved access to high-quality sequencing data for the healthcare industry, supporting more diverse applications in precision medicine, diagnostics, and clinical research.

## NewBiologix Launches Xcell™ to Revolutionize Gene & Cell Therapy Production

NewBiologix has introduced Xcell™, an innovative platform designed to accelerate, optimize, and scale gene and cell therapy production. This cutting-edge technology streamlines manufacturing processes, improving efficiency and scalability for the rapidly growing gene and cell therapy sectors. Xcell™ aims to enhance production timelines and reduce costs, making these advanced therapies more accessible and accelerating their path to clinical application.





## Leica Microsystems Unveils SpectraPlex: Advancing 3D Spatial Phenotyping for Disease Research

Leica Microsystems has launched SpectraPlex, a high-multiplex 3D solution for spatial phenotyping on the STELLARIS confocal platform, setting a new standard for life science research. This innovation enhances spatially resolved 3D data analysis, which is crucial for understanding complex disease states. By enabling deeper insights into pathological conditions, SpectraPlex aids in discovering new cell types, identifying cell states, mapping functional relationships, and supporting the understanding of disease progression and therapeutic target identification.

## Inocras Launches MRDVision: A Breakthrough in MRD Detection with Whole Genome Sequencing

Inocras has launched MRDVision, a next-generation minimal residual disease (MRD) detection solution with a limit of detection (LOD) down to one-in-a-million. Combining Inocras's CancerVision WGS cancer profiling platform and Ultima Genomics' ppmSeq™ technology, MRDVision enables high-accuracy detection of circulating tumor DNA in blood. Unlike traditional panel-based approaches, it offers a whole genome-based strategy, enhancing simplicity, efficiency, and accuracy. The solution provides fast turnaround times low cost, and supports various research applications, including drug discovery, while maintaining >99% sensitivity for mutations, structural variations, and copy number variations.







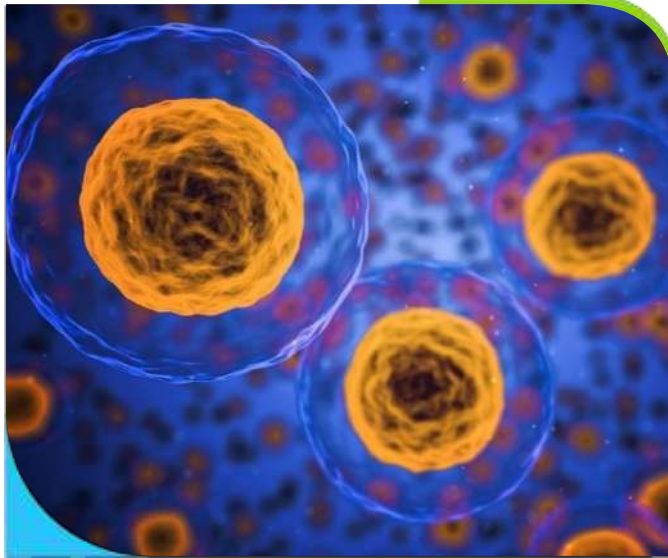
## Creative Proteomics Launches Acylcarnitine Analysis Service to Advance Metabolic Research

Creative Proteomics has developed its Acylcarnitine Analysis Service, which aims to advance metabolic research and improve the understanding and diagnosis of metabolic disorders. This service utilizes high-performance liquid chromatography (HPLC) and tandem mass spectrometry (MS/MS) to precisely quantify and identify acylcarnitines in biological samples. Abnormal acylcarnitine levels can indicate metabolic dysfunctions linked to disorders like fatty acid oxidation defects, mitochondrial diseases, obesity, and diabetes, offering valuable insights for disease management and therapy.

## Twist Bioscience Unveils FlexPrep™ Ultra-High Throughput Library Preparation Kit for Agrigenomics and Population Genomics

Twist Bioscience has introduced the FlexPrep™ Ultra-High Throughput Library Preparation Kit, designed to enhance next-generation sequencing (NGS) applications in agrigenomics and population genomics. This innovative kit leverages Normalization by Ligation™ (NBL) technology to eliminate the need for time-consuming sample quantitation, enabling early pooling and multiplexing. By improving sample throughput and reducing costs, FlexPrep™ is particularly valuable for high-volume genomic studies, such as profiling large populations or agricultural samples. This advancement offers healthcare and pharmaceutical companies a scalable, efficient solution for large-scale genomic research and biomarker discovery.





### **Becton Dickinson Launches BD Omics-One XT WTA Assay for Automated Single-Cell Library Preparation**

Becton Dickinson has launched the BD Omics-One XT WTA Assay, a whole-transcriptome amplification kit designed for automated library preparation in single-cell discovery studies. Optimized for the Hamilton Microlab NGS STAR platform, this robotics-ready solution offers increased throughput and consistency over manual methods. The kit simplifies single-cell workflows with pre-optimized components, tailored reagent volumes for automation compatibility, and robust reagents that ensure high-quality sequencing libraries. Safe stopping points throughout the process minimize manual intervention, enabling efficient and reliable results for large-scale genomic research.

### **Inagene Diagnostics Launches Comprehensive Genetic Test for Cardiovascular Medications in Canada**

Inagene Diagnostics Inc. has introduced Canada's most comprehensive genetic test for cardiovascular medications. Based on how genes interact with medications, this pharmacogenetic test provides personalized treatment recommendations for heart conditions, helping Canadians select the right medications. Using a simple cheek swab, the test analyzes 49 medications, including clopidogrel, warfarin, statins, and screens for over 80 gene variants. The launch follows an Inagene-commissioned study revealing significant gaps in public awareness regarding the impact of genetics on medication effectiveness and side effects. This test represents a step toward precision medicine in cardiovascular care, offering potential benefits for healthcare providers and pharmaceutical companies in optimizing patient outcomes.

The Inagene logo features the word "Inagene" in a bold, dark blue sans-serif font. A registered trademark symbol (®) is located at the top right of the letter "e". To the right of the text is a stylized blue graphic element consisting of a thick line that curves upwards and then downwards, resembling a bracket or a stylized "C".





## Proteitech Genomics Launches MultiPro® Human Discovery Panel for Advanced Single-Cell Multiomics

Proteitech Genomics has launched the MultiPro® Human Discovery Panel, designed to revolutionize single-cell multiomics by enabling the profiling of 325 proteins alongside whole transcriptome analysis in single cells. Built on 10x Genomics' Chromium technology, the panel includes 346 antibodies, targeting both intracellular and surface proteins, such as transcription factors, cytokines, and signaling proteins. This panel provides a more comprehensive view of cellular functions, facilitating deeper insights into disease mechanisms and therapeutic targets. It offers a powerful tool for advancing precision medicine and multiomic research in healthcare and pharmaceutical sectors.

## NeoGenomics Launches AML Express for Rapid Genetic Profiling in Acute Myeloid Leukemia

NeoGenomics has introduced AML Express, a next-generation sequencing (NGS) assay designed for rapid genetic profiling in acute myeloid leukemia (AML). With a turnaround time of 3-4 days, AML Express offers a faster and more cost-effective alternative to traditional single-gene testing methods. The panel covers clinically relevant DNA and RNA alterations across various genes, helping clinicians make more informed decisions. It aids in personalized treatment strategies, clinical trial enrollment, and improving patient care by providing timely and accurate diagnostic and prognostic information.





## seqWell Launches LongPlex Long Fragment Multiplexing Kit for Scalable Long-Read Sequencing

seqWell has introduced the LongPlex™ Long Fragment Multiplexing Kit, a solution designed to overcome scalability and multiplexing limitations in long-read sequencing workflows. The kit enables plate-based DNA fragmentation and sample indexing in conjunction with the PacBio SMRTbell prep kit 3.0, optimizing sequencing efficiency. By accelerating the generation and pooling of barcoded DNA fragments, LongPlex significantly enhances the throughput and scalability of long-read sequencing systems, including PacBio Revio™ and Sequel II®. This solution improves the workflow for genomic research, supporting a broad range of sequencing assays and advancing precision medicine initiatives.

## QIAGEN Receives FDA Clearance for QIAstat-Dx Mini Panel for Outpatient Respiratory Infections

QIAGEN has gained FDA clearance for the QIAstat-Dx Respiratory Panel Mini, designed for rapid, real-time PCR testing of upper respiratory infections in outpatient settings. The test detects five key viral pathogens—influenza A, influenza B, human rhinovirus, RSV, and SARS-CoV-2—delivering results in about one hour with minimal hands-on time. The mini-panel offers enhanced diagnostic capabilities with Ct values and amplification curves, aiding in co-infection detection. This new test complements the QIAstat-Dx Respiratory Panel Plus, addressing both outpatient and inpatient needs for precise, efficient respiratory diagnostics.





## WHO Approves Roche's rtPCR-based Mpox Assay for Emergency Use

Roche has received WHO Emergency Use Listing (EUL) for its cobas® MPXV rtPCR assay, designed for high-throughput testing of mpox. The test utilizes a dual-target PCR approach for MPXV DNA detection, ensuring robust performance even in cases of viral mutations. This approval expands diagnostic capabilities in regions facing mpox outbreaks, allowing rapid, accurate testing for infected patients. Early identification enables healthcare providers to implement targeted treatment strategies and prevent further disease transmission. This approval is crucial in managing global public health emergencies and strengthening outbreak response efforts.

## Thermo Fisher's Oncomine Receives FDA Approval as Brain Tumor Diagnostic

Thermo Fisher Scientific has secured FDA approval for its Oncomine in vitro diagnostic test as a companion diagnostic for grade 2 IDH-mutant glioma, enabling the identification of patients eligible for Voranigo (vorasidenib) treatment by Servier Pharmaceuticals. Oncomine is now also approved for use in diagnosing cholangiocarcinoma (CCA), medullary thyroid cancer (MTC), and thyroid cancer (TC). This approval expands Oncomine's role in precision oncology, enhancing the ability to select patients for targeted therapies based on their specific genetic profiles. The test supports the growing demand for personalized cancer treatments.







## FDA Approves FoundationOne® Liquid CDx as Companion Diagnostic for Itovebi™ in Breast Cancer

Foundation Medicine has received FDA approval for its FoundationOne® Liquid CDx as a companion diagnostic for Itovebi™ (inavolisib) in combination with palbociclib and fulvestrant in the treatment of endocrine-resistant, hormone receptor-positive, HER2-negative breast cancer with a PIK3CA mutation. This approval helps identify patients eligible for targeted therapies based on genomic profiling. FoundationOne® Liquid CDx, analyzing over 300 cancer-related genes from a blood sample, reinforces Foundation Medicine's leadership in next-generation sequencing (NGS) companion diagnostics, now holding the most FDA-approved indications in breast cancer diagnostics.

## Burning Rock & Dizal Secure NMPA Approval for NGS-based Companion Diagnostic for Sunvozertinib in Lung Cancer

Burning Rock Biotech and Dizal announced the approval of their co-developed next-generation sequencing (NGS)-based companion diagnostic (CDx) for sunvozertinib by China's National Medical Products Administration (NMPA). This CDx detects EGFR exon 20 insertion mutations (exon20ins) in lung cancer patients and is the first NGS-based CDx for lung cancer approved in China under the CDx guideline. The approval follows the joint development of Burning Rock's LungCure CDx and Dizal's EGFR exon20ins-targeted therapy, enhancing precision treatment options for non-small cell lung cancer patients.





## WHO Approves Abbott's Alinity m MPXV Assay for Emergency Use to Enhance Global Mpox Testing

The World Health Organization (WHO) has granted Emergency Use Listing (EUL) for Abbott's Alinity m MPXV assay, the first diagnostic test for mpox to receive this approval. This real-time PCR assay enables rapid detection of monkeypox virus (MPXV) DNA from human skin lesion samples. The approval addresses critical diagnostic gaps in regions with ongoing mpox outbreaks, particularly in Africa, where testing delays have hindered timely case confirmation. Abbott's test supports better outbreak management and patient care globally.

## Azenta Gains U.S. Regulatory Approval for Clinical Long-Read Whole Genome Sequencing Test

Azenta, Inc. has received regulatory approval to offer its long-read Whole Genome Sequencing (WGS) test for clinical applications, becoming the first commercial provider in the US. Utilizing PacBio's Revio sequencer, the test delivers highly accurate HiFi sequencing reads to cover genomic regions that are difficult for traditional short-read methods to access. Conducted in Azenta's CLIA-certified and CAP-accredited lab, the test enables precise detection of complex genomic alterations, advancing rare disease diagnosis and treatment strategies.





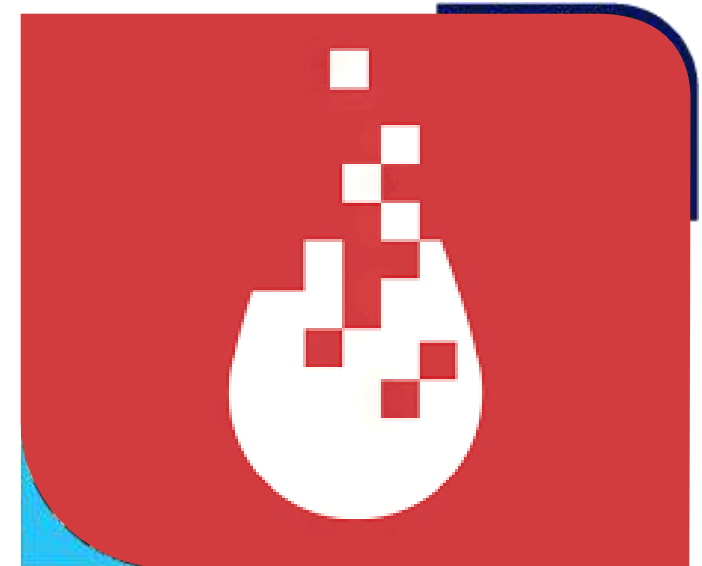
## European Unified Patent Court Invalidates 10x Genomics Patent Against NanoString's CosMx® SMI Products

The European Unified Patent Court (UPC) has ruled in favor of Bruker's NanoString division, invalidating European Patent No. 2794928B1 (the "928 Patent"), asserted by 10x Genomics against NanoString's CosMx® Spatial Molecular Imager (SMI) products. This follows the May 2024 German Federal Patent Court decision, revoking the 928 Patent in Germany. The UPC ruling extends to France and the Netherlands.

An appeal issued in February 2024 is pending, and further proceedings related to the closely connected European Patent 4108782B1 (the "782 Patent") are expected. A hearing before the European Patent Office is scheduled for March 2025.

## DOJ Closes Investigation of CareDx Business Practices With No Wrongdoing Found

Last month, CareDx, Inc. announced that the U.S. Department of Justice (DOJ) concluded its investigation into the company's business practices with no findings of wrongdoing. The DOJ decision follows the U.S. Securities and Exchange Commission's (SEC) closure of its own investigation in September 2023, with no further action taken. The DOJ declined to intervene in a qui tam lawsuit filed by a former employee in 2021, reinforcing CareDx's confidence in the integrity of its operations. The company remains prepared to defend itself should the litigation proceed.







## Foresight Diagnostics Responds to Roche Lawsuit, Deems It Meritless

Foresight Diagnostics has officially responded to the lawsuit filed by Roche Molecular Systems (RMS) and Roche Sequencing Systems (RSS) in the U.S. District Court for the Northern District of California. The lawsuit targets Stanford University and Foresight Diagnostics' co-founders, including Dr. Maximilian Diehn, Dr. Arash Ash Alizadeh, and Dr. David Kurtz. Foresight considers the litigation a meritless attempt to hinder the market adoption of its CLARITY™ minimal residual disease (MRD) technology, which aims to transform cancer care. The company remains confident in its innovative MRD technologies and ongoing collaborations with researchers and customers.

## Ludwig Enterprises Files Provisional Patent for Groundbreaking Breast Cancer Screening Algorithm to Rebrand as Revealia™

Ludwig Enterprises, Inc. has filed a provisional patent for its innovative cancer detection method, "mRNAs Differentially Expressed in Cancer." This breakthrough algorithm, which analyzes a six-mRNA gene combination, offers improved sensitivity and specificity for breast cancer detection compared to existing methods. The technology emerged from research involving over 3,300 samples and advanced machine-learning techniques. In parallel, the company plans to rebrand as Revealia™ and will launch the screening test in 2024, empowering early cancer detection with a non-invasive approach. The rebrand is pending regulatory approvals and a ticker symbol change.



LUDWIG ENTERPRISES INC

vizgen®

 Ultivue

### Vizgen to Merge with Ultivue, Completes Series D Financing Round

Vizgen, a leader in high-resolution spatial transcriptomics, announced its merger with Ultivue, a company specializing in multiplex proteomic spatial tissue profiling. Rob Carson, former CEO of Ultivue, will take the helm as CEO of the combined entity. Terry Lo, former Vizgen CEO, will remain on the board of directors. The merger is set to drive innovation in spatial multiomics, combining Vizgen's expertise in single-cell spatial genomics with Ultivue's multiplex proteomic capabilities. Additionally, Vizgen has completed its Series D financing round, with participation from Arch Venture Partners, Northpond Ventures, and Tao Capital Partners.

### Eurofins to Acquire SYNLAB's Clinical Diagnostics Operations in Spain

Eurofins Scientific has agreed to acquire SYNLAB's clinical diagnostics operations in Spain, pending regulatory approvals, with the transaction expected to close in 2025. SYNLAB's operations, which generated approximately €140 million in revenue in 2023, include genetics and anatomical pathology services across Spain. The acquisition will strengthen Eurofins' presence in Spain, enhancing its clinical diagnostics network led by Eurofins Megalab. Upon completion, the combined entity will have over 2,000 employees and a robust portfolio of diagnostic services, supporting over 10 million patients and processing 100 million tests annually across the country.

SYNLAB  eurofins



## LabGenomics USA Completes Acquisition of IMD CLIA Labs, Expands Nationwide Reach

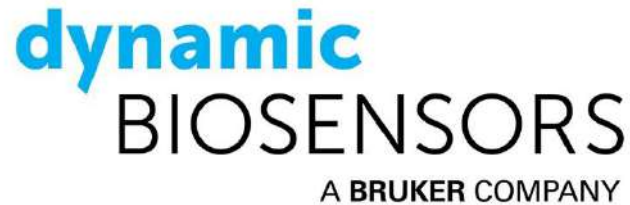
LabGenomics USA has completed the acquisition of Integrated Molecular Diagnostics (IMD) CLIA labs, bringing its total number of CLIA-certified labs in the U.S. to four. This move strengthens LabGenomics' nationwide diagnostic capabilities, particularly in molecular technology. The company, which previously acquired QDx in 2023, now operates in Berkeley, Sacramento, and Aurora. IMD specializes in respiratory diseases, oncology, and hematologic cancers, and collaborates with Cedars-Sinai Molecular Lab on a cancer NGS panel. With CPT and Z codes for reimbursement, LabGenomics is positioned for further service expansion and clinical validation of its offerings.

## Trinity Biotech Enters Oncology Space with Acquisition of EpiCapture

Trinity Biotech has acquired EpiCapture Limited, a company developing a non-invasive test for monitoring the risk of aggressive prostate cancer. This acquisition marks Trinity's strategic entry into the oncology diagnostics market. EpiCapture's urine-based test uses epigenetic analysis to detect DNA methylation patterns indicative of high-grade prostate cancer, reducing the need for invasive biopsies. Trinity plans to leverage its 30 years of diagnostic expertise to commercialize the EpiCapture test in the U.S. and explore regulatory pathways for broader market launches, enhancing its oncology portfolio.







## Bruker Acquires Dynamic Biosensors to Enhance Drug Discovery with Single-Cell Interaction Cytometry Systems

Bruker Corporation has acquired Dynamic Biosensors GmbH, a leader in single-cell interaction cytometry systems for drug discovery. Based in Munich, Dynamic Biosensors specializes in technologies that analyze molecular interactions and kinetics, offering valuable insights for the pharma and biotech industries. Their heli X cyto instrument uses switch SENSE® technology to study molecule-cell interactions directly on cells. With this acquisition, Bruker strengthens its biophysical portfolio, combining Dynamic Biosensors' capabilities with its high-throughput Surface Plasmon Resonance (SPR) systems to offer comprehensive drug discovery and molecular research tools.

## Twist Bioscience Secures \$15 Million Cash Payment through Royalty Purchase Agreement with XOMA

Twist Bioscience has entered a \$15 million royalty purchase agreement with XOMA Royalty Corporation. Under the deal, XOMA will receive half of the future milestone and royalty payments from Twist's existing antibody discovery and biopharma service collaborations. Twist will retain all upfront, service, and other revenues from these collaborations and maintain full rights to any future biopharma deals involving milestone and royalty payments. The agreement does not cover revenue from Twist's synthetic biology (synbio), next-generation sequencing (NGS), or data storage operations, further enhancing the company's strategic flexibility in these areas.





## **SPT Labtech and ICE Bioscience Launch Joint Automated Laboratory in China for Intelligent Drug Screening**

SPT Labtech and ICE Bioscience have launched a joint laboratory in China focused on advancing intelligent drug screening and life sciences automation. The collaboration integrates SPT Labtech's firefly® liquid handling platform, which combines non-contact positive displacement dispensing with flexible pipetting, enhancing high-throughput screening (HTS) and assay development. With a compact design and broad volume range, firefly® supports ICE Bioscience's research and development efforts in drug discovery, enabling greater innovation and offering global researchers new opportunities to accelerate drug development and discovery.



### Akoya's Spatial Proteomics Platforms Chosen for UK's MANIFEST Consortium to Enhance Cancer

Akoya Biosciences' PhenoCycler® Fusion and Phenolmager® HT, spatial proteomics platforms, have been selected for the UK-based MANIFEST program, a landmark initiative to advance cancer immunotherapy. Funded by the UK Office of Life Sciences and the Medical Research Council, the program will leverage Akoya's platforms to analyze tissue samples and profile immune cell interactions in the tumor microenvironment. The research will explore why some cancer patients respond to immunotherapy while others do not, providing key insights into treatment outcomes and potential side effects. The four-year project will involve over 6,000 patients and will be led by top UK institutions.

### MGI and OncoDNA Collaborate to Streamline NGS Workflow for Comprehensive Genomic Profiling in Clinical Oncology

MGI and OncoDNA have announced a collaboration to enhance the implementation of the OncoDEEP® Kit for Comprehensive Genomic Profiling (CGP) in clinical practice. The partnership ensures that the OncoDEEP® Kit's end-to-end solution, including sequencing, secondary analysis, and interpretation (OncoKDM™), is fully compatible with MGI's DNBSEQ™ sequencing technology. This breakthrough enables laboratories to perform high-accuracy, high-sensitivity solid tumor profiling on MGI's sequencers, offering enhanced clinical insights for precision oncology. The collaboration opens new opportunities for laboratories by making the OncoDEEP® Kit technology-neutral, previously limited to a single sequencing platform.







## ADx NeuroSciences and Alamar Biosciences Partner to Develop Customized Biomarker Assays for Neurological

ADx NeuroSciences, a leader in neurodegenerative disease biomarkers, and Alamar Biosciences, renowned for its ultra-sensitive immunoassay technology, have entered a partnership to accelerate biopharma clinical development. The collaboration will leverage Alamar's NULISA™ and ARGO™ HT systems to create customized blood-based biomarker assays. These tailored solutions will aid in detecting and quantifying critical biomarkers, supporting the development of novel therapeutics for neurological diseases such as Alzheimer's, Parkinson's, and ALS. By combining their expertise, the companies aim to enhance drug development efforts in the neurodegenerative disease space, providing biopharma with advanced tools for clinical research.

## PredxBio Partners with the University of Queensland to Develop Spatial Biomarker Companion Diagnostic for Immunotherapy

PredxBio has announced a collaboration with Dr. Arutha Kulasinghe of the University of Queensland and the Queensland Spatial Biology Centre to advance immunotherapy research. The partnership aims to develop a selective spatial-biomarker-based companion diagnostic for predicting immunotherapy responses, focusing on non-small cell lung cancer (NSCLC). The collaboration will present findings at the SITC 2024 Conference, showcasing a joint study on spatial intratumoral heterogeneity (ITH) and immunometabolic pathways in NSCLC. The research leverages PredxBio's SpaceIQ™ platform to gain insights into immunotherapy response, potentially improving patient selection and treatment strategies in oncology.



THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA



### 4baseCare Partners with Innovate Life Sciences to Advance Genomics Research for Precision Oncology in Dubai

4baseCare, an Illumina Accelerator Company, has partnered strategically with Innovate Life Sciences at Dubai Science Park to drive precision oncology research. This collaboration, announced on October 17, 2024, will focus on technology transfer and the use of advanced genomic testing tools, including cancer gene panels, whole exome sequencing, and transcriptome analysis. The partnership aims to enhance oncologists' ability to personalize cancer treatment in the Middle East and Asia, where cancer rates are rising. The event was attended by senior leaders from Dubai Science Park and Fajr Capital, emphasizing the partnership's significance in addressing cancer's growing impact in the region.

### Nucleome Therapeutics Strategically Collaborates With J&J to Identify Target Genes in Autoimmune Diseases

Nucleome Therapeutics has entered a strategic research collaboration with Johnson & Johnson to identify target genes linked to autoimmune diseases. Leveraging its advanced 3D genomics platform and machine learning technologies, Nucleome will pinpoint specific DNA changes that increase susceptibility to autoimmune conditions. By combining Nucleome's high-resolution genomics approach with Johnson & Johnson's immunology and data science expertise, the partnership aims to discover key genes and cell types involved in disease mechanisms. The collaboration seeks to enhance patient classification, ultimately enabling more personalized treatments and improving therapeutic outcomes for autoimmune disease sufferers.



**Johnson & Johnson**

# "T'EMPUS



## Avacta and Tempus Enter Strategic Collaboration to Advance AI-Driven Drug Development in Oncology

Avacta Therapeutics has announced a strategic collaboration with Tempus AI to accelerate AI-driven drug development in oncology. Tempus will provide Avacta with access to its multimodal datasets, which include clinical data from over 200,000 cancer patients, enabling deeper insights into the tumor microenvironment and fibroblast activation protein (FAP) activity. The collaboration will enhance Avacta's pre|CISION® platform, which includes two new preclinical programs, AVA6103 and AVA7100, designed to target tumors with precision while minimizing healthy tissue exposure. This partnership aims to expand the reach of Avacta's therapies across a broad range of cancer indications.

## BostonGene and Sarah Cannon Research Institute Partner to Advance Targeted Cancer Therapies

BostonGene and Sarah Cannon Research Institute (SCRI) have launched a collaboration to accelerate the development of targeted cancer therapies. By integrating BostonGene's AI-driven molecular and immune profiling solutions into SCRI's Phase 1 clinical trials, the partnership aims to improve patient outcomes through advanced molecular testing. The collaboration will validate novel biomarkers using BostonGene's multiomics platform, enhancing real-world cancer treatment approaches. Additionally, the integration of Genospace, SCRI's precision medicine platform, will examine how molecular profiling impacts clinical trial enrollment and pre-screening efficiency, including the role of HLA genotyping in patient selection.

# BostonGene







## Delve Bio Partners with Broad Clinical Labs to Expand Metagenomic Sequencing for Neurological Infections

Delve Bio has partnered with Broad Clinical Labs (BCL) to scale the use of metagenomic next-generation sequencing (mNGS) to diagnose neurological infections. Delve Bio's mNGS platform offers a comprehensive, hypothesis-free diagnostic approach by sequencing all nucleic acids in a sample to identify pathogens, including bacteria, fungi, and viruses. The collaboration will leverage BCL's clinical genomics expertise and operational efficiency to accelerate commercialization, enabling rapid results within two days. This partnership aims to improve diagnostic accuracy and speed for patients suffering from neurological infections, enhancing treatment outcomes and patient care.

## Next Gen Diagnostics Partners with Shionogi to Advance Cefiderocol Susceptibility Testing

Next Gen Diagnostics (NGD), a global leader in machine learning-based genome sequencing solutions, has partnered with Shionogi & Co., Ltd. to develop advanced models predicting bacterial susceptibility to cefiderocol. This collaboration aims to overcome challenges in traditional phenotypic testing, which requires specialized media due to cefiderocol's unique mode of entry. NGD's proprietary whole genome sequencing infrastructure and machine learning expertise will enable sequence-based susceptibility determinations, streamlining testing and supporting antibiotic stewardship. By providing innovative testing options, this partnership underscores Shionogi's commitment to addressing resistance in Gram-negative bacteria and improving global healthcare outcomes.





## Owkin and AstraZeneca Partner to Develop AI Tool for gBRCA Pre-Screening in Breast Cancer

Owkin, a leader in AI-driven precision drug discovery, has announced a strategic partnership with AstraZeneca to develop an AI-powered tool for pre-screening gBRCA mutations in breast cancer. The tool, which will utilize digitized pathology slides, aims to accelerate access to gBRCA testing, a critical step in personalized cancer treatment that is often underutilized. This collaboration builds on Owkin's ongoing efforts with Gustave Roussy and The Centre Léon Bérard through the PortrAlt consortium, leveraging AI-enabled digital pathology to enhance precision medicine and ensure more patients benefit from early and accurate genetic testing.

## Tempus and JW Pharmaceutical Collaborate to Accelerate Oncology R&D with Real-World Data and Biological Modeling

Tempus, a leader in AI-driven precision medicine, has entered into a collaboration with JW Pharmaceutical to enhance early-stage oncology research. By integrating real-world data (RWD) with Tempus' biological modeling platform and organoid models, the partnership aims to expedite hypothesis generation, asset screening, and biomarker identification. JW Pharma, a pioneer in RWD integration, will utilize Tempus' multimodal dataset and patient-derived organoid models to validate early pipeline assets and inform therapeutic decisions. This collaboration holds the potential to accelerate drug development, improving precision and speed in the identification of promising oncology treatments and biomarkers for patient populations.



**"T"EMPUS**

**Stay tuned for more such updates in the coming months!**



# Ingenious Brain

Future-Proofing Businesses

## Contact Us At

*India Office (Headquarters)*

+91 124 429 4218

*USA Office*

+1-347-491-3868

*UK Office*

+44 207 193 3548

Mail Us at

**[contact@iebrain.com](mailto:contact@iebrain.com)**

Follow us on



## Our Capabilities

Patent Services  
Technology Consulting  
Business Consulting

## Resources

Blogs  
White paper  
IeB Insights  
Case studies  
Webinars  
Events  
Industry news  
Reports  
Press releases

## Our Industries

Decarbonisation &  
Sustainability  
New Energy & Storage  
Healthcare  
Chemicals & Materials  
Packaging  
Mobility  
Electronics &  
Semiconductors  
Information &  
Communications Technology  
Food and Beverages  
FMCG

Find more about us at  
**[www.iebrain.com](http://www.iebrain.com)**